Multiple hereditary exostoses

Children with multiple hereditary exostoses (MHE) have numerous osteochondromas, with the most prominent lesions typically over the appendicular skeleton. A recent report noted a high rate of intracanal lesions in this patient population and recommended preventative spinal screening with magnetic resonance imaging (MRI) or computed tomography (CT).

All pediatric patients treated for MHE were retrospectively identified. Records were reviewed to determine demographics, previous orthopedic surgery, and indication and results of axial spine imaging (CT or MRI). Imaging studies were reviewed to evaluate the presence of intracanal and compressive spinal lesions.

Between 1990 and 2011, axial imaging was performed in nine patients with MHE due to concerns of pain, weakness, and/or dizziness. These patients had moderate disease involvement, with a mean of 4.9 previous orthopedic surgeries to address skeletal osteochondromas. Two patients with MHE had cervical spinal stenosis secondary to intracanal osteochondromas. Both children successfully underwent spinal decompression. Thus, of our MHE population undergoing axial imaging, 22 % were noted to have intracanal lesions.

It reveals a >20 % rate of compressive intracanal osteochondromas in MHE patients undergoing spinal imaging. These two patients represent 5 % of the MHE patients treated. These lesions may be slow growing, and significant consequences can occur if not identified promptly. Thus, routine axial screening of the spinal canal may be warranted in these children [1)].

1)
Ashraf A, Larson AN, Ferski G, Mielke CH, Wetjen NM, Guidera KJ. Spinal stenosis frequent in children with multiple hereditary exostoses. J Child Orthop. 2013 Jun;7(3):183-94. doi: 10.1007/s11832-013-0484-9. Epub 2013 Feb 19. PubMed PMID: 24432077.